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ABSTRACT

Component scores for the Basic Interest Scales (BIS) and the Occupational Scales (O-S) of the revised Strong Vocational Interest Blank for Women (TW 398) were separately developed and intercorrelated along with standardized composite scores representing each of the eleven Groups of Occupational scales on the profile. The dimensionality of the BIS and O-S are similar, but their components are only partially congruent. Some profile groups provide relatively good representations of BIS and/or Occupational Scale components, but a range of high-level women's occupations seem poorly defined by the BIS and their components. (Author)

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SOME STRUCTURAL RELATIONSHIPS WITHIN THE 1969 SVIB FOR WOMEN (TW 398)

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SOME STRUCTURAL RELATIONSHIPS WITHIN THE 1969 SVIB FOR WOMEN (TW 398)

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The structural relationships within and across the Basic Interest Scales (BIS) and Occupational Scales (O-S) of the 1969 revision of the Strong Vocational Interest Blank for Women (SVIB Form TW 398) have not been generally explored despite the fact that they are two very different types of scales. The 19 BIS are relatively short scales (median length = 12) of homogeneous, content-obvious items with little item overlap, and high scores are based directly on the number of items which a person affirms. The 58 O-S on the other hand are built empirically on the differences between the interests of members in an occupation and a reference group of women-in-general. Within the O-S, scale content is heterogeneous, items are scored as often as they contribute a significant difference to any scale, and item overlap among scales is extensive. Since both types of scales are based on the same item pool, there is item overlap between them. (Parenthetically, item overlap is not a technical or theoretical deterrent to component analyses of scales to examine the manifest themes among them, although it is objectionable for factor analysis and inferential purposes).

Campbell (1971) and Johnson (1971) present data and discussion of BIS and O-S relationships on a scale-to-scale basis and Elliott (1971) has done a principal component analysis of the O-S, but analytical data are still

relatively limited. Helpfully, at least some rough ideas about the structure of each set of scales are available merely from the organization of the SVIB profile. The BIS are ordered so that adjacent scales are generally correlated positively, and the O-S groupings are based in part on scale intercorrelations and the results of factor analyses early in the history of the SVIB-W (Campbell, 1971).

Elliott's analysis of the O-S had as a specific focus the attempt to identify and interpret the interests of female students majoring in elementary education. His data are from 100 university juniors in that curriculum, and he found that "seven factors ... accounted for over eighty percent of the total variance (1971, p. 4)..." Rather than interpret his results from the varimax-rotated loadings of the O-S themselves, which he does not fully display, he borrows classifications from Holland (1966) and adds some modifications, procedures which the present authors do not find helpful. Where definite similarities appear between the loadings he reports and those in the present study they are mentioned below.

Method

Sample

The subjects for this study were 206 women students initiating service at the Counseling Center at the University of California, Berkeley, in a portion of the academic year 1969-70. All students to whom the SVIB was administered during the period of data collection were included; the sample is made up of 41 freshmen, 37 sophomores, 45 juniors, 62 seniors, 18 graduate students, and 3 not classified. Previous research has shown that counseling center clients are representative in general of student populations, and specific data establishing this point for the SVIB-W on the Berkeley campus are present in a study by Kirk (in press).

Procedure

Three scale summary analyses were performed: (a) a principal component analysis with rotation to the normal varimax criterion was made of the 19 BIS, and BIS component scores were derived, (b) a similar analysis was made of the 58 O-S and their component scores were generated, and (c) cluster scores were derived for each of the eleven Groups of O-S on the profile. These three sets of scores were then intercorrelated and also correlated with all of the original scale scores on the profile.

The decisions as to how many components to use were based on judgment using formulations by Kaiser (1960, 1970) and Cattell (the scree criterion; Cattell, 1966) and study of the data from various alternatives. The cluster scores for the eleven O-S Groups were derived by converting each scale score to a standard score, based on the sample statistics, obtaining a mean of the scores for the scales in each Group, and then restandardizing.

Results

Dimensionality of the BIS and Occupational Scales

The eigenvalues and associated variances for the BIS and O-S correlation matrices are shown in Table 1. For the BIS the final consideration in deciding to report and use six components was that with five components the

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Insert Table 1 about here

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Biological Science and Medical Service scales were combined into a large weak cluster with the Numbers, Physical Science and Mechanical scales, while with both six and seven components two distinct clusters emerged from these scales. Seven components gave a structure essentially identical with six except that the seventh appeared to be devoid of conceptual meaning.

For the O-S both the scree criterion and the comparison of loadings in solutions of five, six, seven and nine components suggest that perhaps six would be best. However, in the present study seven components were used, with reliance being placed both on Kaiser's (1970) statement that overfactoring is more conservative than underfactoring and the observation that except for the seventh component itself, the six and seven component solution were very similar.

Structure of the BIS

The first segment of Table 2 gives the structure of the BIS. The first

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Insert Table 2 about here

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component involves esthetic interests including writing and is about one and a half times as large as the other five, which are approximately equal in size. The second involves social service activities with an interesting loading on the Sports scale. The item in the Sports scale help explain this ("athletic director," "playground director," "physical education") in that many of them are social and/or service in nature. The third component is defined by the Numbers, Physical Science and Mechanical scales and is distinct in this analysis from the fifth component which combines the Biological Science and the Medical Service scales. The fourth component consists of the Public Speaking and Law/Politics scales, and the sixth, which combines Merchandizing, Office Practices and some Teaching with Homemaking, could be considered a domestic-housewife cluster.

Structure of the Occupational Scales

Part one of Table 3 gives the correlations of the O-S with their components. Possible interpretations of these components is first offered in

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Insert Table 3 about here

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conventional fashion on the basis of the O-S themselves and then the nature of the components is considered from their correlations with the BIS, given in part two of Table 2.

The strongly bipolar first component has its positive end primarily determined by the scales in Group XI, called the Nonprofessional group by Campbell (1971). The Saleswoman scale loads it .94 and the other major scales are Telephone Operator (.88), Executive Housekeeper (.88), Business Education Teacher (.83), etc. At the negative end is Artist (-.79), Translator (-.76), Psychologist (-.72). This component suggests applied, stereotypic "housewife" interests vs. professional interests, with all that this entails. The BIS reflect this too, in Table 2, except that they do not show the professional interests directly.

The second component is predominantly one of science interests with all of the scales in Group VI loading is heavily, and the BIS confirm this, pulling in the health sciences and technologies as well. The third component is clearly people-oriented, social service and teaching, the high-loading scales coming chiefly from Group IV, but not including Nun-Teacher, which shows up later. It is interesting to note that the BIS Social Service scale loads this component only moderately, but the Public Speaking and Law/Politics scales load it convincingly. The fourth component appears to emphasize nurturant activities, e.g. nursing, elementary teaching vs. managerial and administrative and sales activities. The BIS

loadings are helpful although the magnitude of the esthetic and outdoor interests is perhaps surprising. The fifth component appears to involve technological, physically expressive interests in contrast with professional, verbal and esthetic-expressive interests, and the "fit" with the BIS seems reasonable if not very complete. The sixth component finds Airline Stewardesses, Entertainers and Models at one end of the continuum and Nun-Teachers at the other, and the BIS would appear to make little or no interpretive contribution to this or the next O-S component. The seventh component, with apparently little to recommend it, has a moderate correlation with the Buyer's scale and a very modest correlation with the Interior Decorator's scale.

These results have some definite similarities to Elliott's, mentioned above. Recognizing that comparison by inspection is very unsatisfactory, what relationships there are appear as follows: the first components are similar except for sign, his fourth component (science) is like our second, and his second is most like our fourth, although not as close a match as those just mentioned. His third and our third are both people oriented, and the fifth and sixth components bear some similarities except that the orders are reversed and there is a shift in signs vis-a-vis our sixth component. The seventh components don't match at all.

The Cluster Score of the Occupational Scale Groups

The correlations among O-S group scores are given in Table 4. The names

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Insert Table 4 about here

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provided for the groups are those given by Campbell (1971, p. 276) and the correlation of these group scores with their constituent scales and the other OS scales is given in part three of Table 3. The two particularly

maverick O-S scales in terms of their group memberships would appear to be the Nun-Teacher scale in Group IV and the Airline Stewardess scale in Group XI. Table 4 shows the group scales to be heavily intercorrelated, as expected, and the major polarity among them is between Group XI and Group V. This fits with the structure of the first O-S component described above.

Relationships Among Component and Cluster Scores

Table 4 also shows the relationships among the various summary scales generated in this study. In the lower right-hand quadrant we see that the alignment between the basic interest scale components and the occupational scale components is not especially good. The highest correlation, $r = .76$, occurs between ~~the~~ BIS component IV comprised of the Public Speaking and Law/Politics scales and the O-S Component III which is made up from the people oriented, social service occupations. Reasonably good matches also exist between the science components (BIS III and O-S II) and what might be called the components of nonprofessional interests (BIS VI and O-S XI).

The O-S group cluster scores also do not match particularly well with the BIS components presented here, as Table 4 indicates. However, it will be noticed that there are three very close relationships between the O-S components and the O-S group scales. The composite of scales in Group XI, the nonprofessional group, is a good representative of the first component of the O-S scales; the cluster of scores for Group VI, the scientific group, represents the second O-S component very nicely; and the composite score for Group IV, Social Service, is an excellent representative of the third O-S component. O-S components VI and VII are relatively unrelated to any of the occupational group scores or the BIS components.

A different type of cross-scale information is also present on Table 2 and 3, namely, the amounts of variance the BIS components and O-S components

extract from the scales from which they originate and the amount of variance they account for across scale types. For example, Table 2 shows that the O-S components account for about 60% of the BIS variance and Page 2 of Table 3 indicates that the six BIS components are associated with 70% of the O-S variance.

Discussion

Four fairly specific points stand out from among the host of data presented above. First, the dimensionality of the BIS and O-S appears to be about equal. Second, however, the content of the components from these two types of scales does not appear to be closely related even though the use of the same or similar names seems appropriate to naming various components. This is interesting in as much as instrument variance is controlled in these comparisons and the lack of congruence suggests method variance related to type of scale derivation as being at work even at the component level. It also helps to focus a more fundamental question about the possible existence and nature of different types of vocational interest variance, even variance assigned the same name. As a tangential point, the BIS components are definitely easier to interpret than the O-S components, especially the higher numbered components, but this is a direct function of the way in which the BIS are constructed.

As a third point it seems important to remember that the BIS were developed from within an item pool assembled primarily for the occupational scales. Users of the SVIB should return to the BIS items within particular scales and notice that if the user were building scales de novo to measure the BIS dimensions, i.e., were not constrained by the existing item pool, they might frequently want items different from those which are present.

This comment also applies to the recently added SVIB-Holland scales, not examined here because they were unavailable at the time the data were collected and scored.

Fourth, considering various of the results above, it seems appropriate to ask whether Campbell's expectation that "as the Basic Scales become more widely used and understood, they will take over many of the functions of the occupational groups (Campbell, 1971, p. 277)" should be fully met. On the basis of the considerable lack of comparability shown in the data above, it appears a definite role should be reserved for considering the O-S in group form.

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Table 1

Eigenvalue and Associated Variances for the

Basic Interest Scales and Occupational Scales Correlation Matrices

		Roots								
		1	2	3	4	5	6	7	8	9
Basic Interest Scales	Eigenvalues	4.78	3.18	2.17	2.00	1.45	.83	.75	.58	.57
	Percent of Variance	25.2	16.7	11.4	10.5	7.6	4.3	4.0	3.1	3.0
	Cummulative Variance Percent	25.2	41.9	53.3	63.8	71.5	75.8	79.8	82.8	85.8
Occupational Scales	Eigenvalues	18.96	12.72	6.70	6.79	2.31	2.29	1.10	.94	.89
	Percent of Variance	32.7	21.9	11.5	10.8	4.0	4.0	1.9	1.6	1.5
	Cummulative Variance Percent	32.7	54.6	66.2	77.0	81.0	84.9	86.8	88.5	90.0

Table 2

Correlations of the Women's SVIB (TW398) Basic Interest Scales with their Components, the Occupational Scale Components and Composite Scores for the Occupational Scale Groups

Basic Interest Scales	M	SD	Basic Interest Scale Components I	II	III	IV	V	VI	Var.	Occupational Scale Components I	II	III	IV	V	VI	VII	Var.	Composite Scores for Occupational Scale Groups I	II	III	IV	V	VI	VII	VIII	IX	X	XI
Public Speaking	50	9	22	11	-04	87	02	12	.84	02	-02	75	-11	-16	-32	-16	.72	31	-05	44	64	31	-30	14	31	10	-10	-13
Law/Politics	50	11	-06	04	08	87	10	-02	.78	-00	16	69	-33	-05	-16	-08	.65	-01	-18	27	55	31	-00	40	46	00	-05	-16
Merchandising	47	9	06	15	05	35	-09	75	.72	59	-07	38	17	-10	-41	17	.74	-01	-19	04	34	-29	-42	-15	27	65	22	53
Office Practices	47	8	-31	11	51	08	05	59	.72	83	28	05	-11	01	09	-19	.82	-47	-71	-43	01	-49	12	18	43	52	45	75
Numbers	49	9	-26	04	85	02	-01	04	.79	40	60	-10	-27	01	-03	-06	.61	-50	-47	-54	-20	-22	57	35	43	28	24	32
Physical Science	51	9	13	00	72	13	47	-06	.78	01	88	07	09	01	-09	-10	.81	-33	-24	-40	-06	12	72	28	-01	32	37	02
Mechanical	51	10	20	07	70	-13	40	15	.72	16	74	-11	23	08	-14	-08	.67	-34	-18	-53	-16	-17	59	18	-13	38	45	20
Outdoors	52	9	51	28	05	-36	34	15	.61	-10	21	-04	61	07	04	-08	.44	11	15	-10	04	-10	08	-28	-59	22	35	01
Biological Science	52	9	02	13	21	14	90	-09	.89	-09	61	20	23	37	-06	-11	.63	-22	-27	-34	07	03	47	15	-17	23	62	-03
Medical Service	51	9	01	31	18	-03	87	10	.88	11	52	14	41	45	03	-19	.71	-22	-39	-42	08	-21	35	-01	-28	37	82	21
Teaching	51	10	28	59	-11	03	13	51	.72	30	-05	41	64	07	06	-19	.72	16	-13	07	52	-25	-31	-45	-30	51	49	30
Social Service	49	9	07	69	-26	20	20	38	.77	21	-12	57	44	33	10	-12	.71	06	-25	06	65	-23	-33	-17	-19	32	52	24
Sports	48	8	01	81	09	05	21	01	.71	17	09	28	28	57	-17	-16	.57	-11	-36	-26	28	-43	-05	-00	-16	30	57	26
Homemaking	50	9	24	18	08	-33	03	73	.74	51	-00	-06	62	-13	-02	09	.68	01	-11	-12	06	-46	-23	-59	-25	75	42	54
Religious Activities	41	9	21	70	19	-03	05	12	.54	31	07	22	43	13	07	-15	.38	03	-20	-11	29	-36	-10	-25	-15	37	49	33
Music	53	9	80	27	10	-04	-03	-12	.74	-18	06	12	50	-32	-10	-26	.48	57	36	31	18	20	-10	-41	-38	07	01	-18
Art	54	9	80	-00	-16	-07	13	26	.76	-17	-04	02	66	-31	-31	-10	.67	49	57	32	09	14	-26	-54	-54	16	01	-12
Performing Arts	53	10	89	14	-03	15	-01	02	.84	-20	08	19	52	-36	-39	-37	.78	75	45	49	21	24	-32	-49	-41	09	-09	-20
Writing	53	8	75	-07	-07	48	-03	12	.82	-21	-04	43	25	-51	-33	-32	.76	59	41	70	40	49	-30	-24	-16	00	-24	-30
Percent of Total Variance			17.7	12.4	11.8	11.7	11.5	10.7	75.8	10.0	13.3	11.2	16.6	7.6	4.0	3.2	65.9											

NOTE: All components are principal components rotated to varimax. Decimals for correlations have been omitted. Correlations ≥ .50 are underlined.

Table 3

Correlations of the Women's SVIB (TW398) Occupational Scales with their Components, the Basic Interest Scale Components and Composite Scores for the Occupational Scale Groups

Occupational Scales	M	SD	Occupational Scale Components I	II	III	IV	V	VI	VII	Var.	Basic Interest Scale Components I	II	III	IV	V	VI	Var.	Composite Scores for Occupational Scale Groups I	II	III	IV	V	VI	VII	VIII	IX	X	XI
Music Teacher	19	11	04	-39	50	40	-34	13	-03	.69	42	35	-28	18	-29	19	.53	67	26	53	63	13	-55	-47	-09	13	-09	-06
Entertainer	32	12	-48	-34	03	32	-31	-50	-24	.85	73	-09	-31	09	-13	-20	.70	89	66	62	05	37	-43	-44	-41	-21	-41	-43
Musician Performer	35	12	-43	-21	11	41	-49	-07	-28	.74	74	-06	-27	03	-07	-15	.65	89	64	64	19	47	-28	-47	-42	-22	-31	-44
Model	30	10	-41	-54	-02	-03	-17	-50	-13	.76	33	-22	-46	20	-25	-25	.54	76	51	59	-03	29	-51	-26	-13	-36	-52	-36
Art Teacher	30	15	-38	-13	04	66	-42	-22	-01	.82	79	-04	-27	-10	03	10	.73	64	82	49	15	32	-29	-58	-60	02	-18	-34
Artist	33	12	-79	-17	-36	-02	-30	08	11	.88	31	-46	-31	-29	-12	-58	.83	44	82	38	-30	58	08	-11	-37	-65	-61	-73
Interior Decorator	21	13	-46	-33	-05	07	-56	-37	35	.78	49	-40	-32	05	-36	-15	.66	61	89	62	-04	49	-35	-30	-11	-27	-70	-49
Newswoman	33	12	-69	-33	22	-12	46	-18	-01	.89	45	-34	-45	34	-24	-40	.85	67	73	85	19	77	-29	-06	-11	-56	-74	-72
English Teacher	32	12	-20	-45	55	11	-53	-08	-20	.85	47	-03	-44	49	-28	10	.91	68	43	95	59	51	-61	-30	-02	-15	-43	-34
Language Teacher	34	12	-17	-60	40	10	-54	02	-24	.85	40	-04	-52	35	-40	10	.72	68	45	93	48	42	-67	-40	-06	-22	-50	-30
YWCA Staff	33	11	-12	-23	89	07	-03	-14	-04	.89	22	31	-30	68	-03	12	.71	43	07	54	89	32	-47	02	13	04	-06	-22
Recreation Leader	31	11	20	-12	82	32	14	-24	-06	.90	22	58	-14	54	06	36	.91	30	-15	28	82	-07	-46	-13	05	41	32	15
Director Christian Ed.	19	12	01	-34	73	45	-05	20	-09	.89	29	52	-39	33	-03	21	.67	44	08	50	87	12	-53	-38	-17	17	16	06
Nun-Teacher	14	9	11	22	21	23	08	72	-11	.68	-08	37	14	-13	14	-02	.20	-19	-22	-14	38	-05	23	03	-12	07	41	08
Guidance Counselor	26	13	15	-14	93	08	-03	04	09	.91	03	38	-20	65	-02	27	.68	19	-16	40	93	17	-40	-03	28	26	13	00
Social Science Teacher	31	11	03	-20	80	-25	-18	10	-01	.79	-08	12	-25	74	-15	11	.66	12	-07	56	78	35	-33	18	41	-05	-18	-17
Social Worker	24	11	-24	-01	79	-02	-03	27	21	.76	03	18	-28	49	12	-02	.37	13	03	39	79	47	-13	16	16	-09	-01	-34
Speech Pathologist	32	12	-64	-04	60	-14	-25	01	-06	.85	27	-14	-31	58	07	-40	.69	48	40	65	52	85	-07	14	04	-45	-42	-76
Psychologist	28	13	-72	32	32	-11	-36	-00	04	.86	36	-36	-02	32	17	-41	.56	28	47	45	22	93	30	22	-09	-40	-43	-82
Librarian	34	11	-45	07	24	-24	-72	21	02	.87	27	-50	-09	33	-15	-21	.50	28	49	64	20	87	08	11	12	-41	-64	65
Translator	37	11	-76	17	-01	-21	-46	01	-07	.86	36	-58	-10	16	07	-51	.77	35	59	48	-09	90	27	17	-13	-59	-61	-83
Physician	31	12	-68	64	-13	-05	06	16	-01	.92	12	-19	26	-11	47	-67	.79	-10	21	-15	-22	52	78	32	-25	-37	-02	-66
Dentist	24	10	-20	78	-34	-13	13	22	16	.84	18	-26	48	-28	49	-30	.73	-52	-14	-56	-43	13	90	44	-03	-07	22	-15
Medical Technologist	28	13	07	85	-30	-01	32	16	04	.95	-25	-01	65	-30	55	-15	.89	-64	-40	-79	-39	-17	90	37	-03	21	54	13
Chemist	17	14	-35	83	-09	-15	-03	29	-01	.93	-02	-20	54	-07	43	-43	.70	-35	-06	-34	-19	40	93	45	-01	-16	10	-40
Mathematician	23	14	-52	54	-29	-30	-16	40	-05	.93	-03	-37	35	-20	16	-60	.69	-22	13	-17	-34	52	80	41	-05	-48	-25	-57
Computer Programmer	31	11	13	75	-34	-18	02	-14	-21	.75	-09	-15	75	-11	24	-09	.66	-50	-26	-55	-46	-09	77	36	12	13	22	12
Math-Science Teacher	29	11	41	64	-21	-28	35	32	-06	.92	-62	06	63	-19	29	04	.90	-85	-69	-82	-28	-37	73	48	32	25	50	39
Engineer	24	13	-04	88	-07	-34	-01	02	-08	.90	-12	-15	76	09	31	-26	.79	-51	-26	-47	-24	17	90	62	27	-00	14	-12

Table 3 (Continued)

Correlations of the Women's SVIB (TW398) Occupational Scales with their Components, the Basic Interest Scale Components and Composite Scores for the Occupational Scale Groups

Occupational Scales	M	SD	Occupational Scale Components I	II	III	IV	V	VI	VII	Var.	Basic Interest Scale Components I	II	III	IV	V	VI	Var.	Composite Scores for Occupational Scale Groups I	II	III	IV	V	VI	VII	VIII	IX	X	XI
Army--Enlisted	27	9	30	44	08	-61	33	21	-16	.81	-56	08	47	20	14	-08	.61	-67	-66	-51	-04	-15	51	85	53	-07	23	25
Navy--Enlisted	32	9	10	36	-40	-48	53	20	-06	.85	-57	00	39	-28	15	-25	.67	-71	-49	-71	-46	-32	60	70	19	-20	23	19
Army--Officer	30	12	-15	26	67	-53	-05	-20	-01	.87	-09	-05	12	77	05	-14	.65	-05	-11	25	48	46	13	72	54	-18	-21	-30
Navy--Officer	37	10	-46	16	13	-80	-01	-09	11	.90	-30	-43	04	41	-05	-56	.76	-12	08	13	-06	56	33	78	47	-60	-54	-55
Lawyer	26	13	-40	14	41	-69	-32	-09	07	.93	-07	-37	06	67	-15	-44	.81	08	16	42	23	72	18	52	56	-48	-60	-58
Accountant	19	12	19	45	-07	-80	-16	-05	04	.91	-41	-32	63	28	-18	-22	.83	-46	-33	-30	-26	12	54	72	77	-13	-25	02
Bankwoman	21	11	78	17	05	-53	-03	05	05	.92	-59	-02	45	23	-20	36	.77	-54	-69	-39	-05	-39	12	40	82	32	15	64
Life Ins. Underwriter	19	10	-05	-31	52	-55	-10	-32	15	.78	-17	-03	-16	69	-37	-15	.69	26	04	42	39	25	-34	31	66	-21	-45	-19
Buyer	13	9	54	-05	16	-37	-09	-02	61	.46	-45	-06	15	17	-31	32	.45	-29	-31	-18	11	-24	-11	24	74	29	-02	43
Business Ed. Teacher	16	10	83	-13	14	-30	05	14	02	.89	-54	18	20	13	-29	51	.73	-42	-65	-27	14	-54	-17	13	62	40	22	71
Home Econ. Teacher	22	15	67	-10	07	61	-06	-20	21	.87	16	28	03	-15	-02	82	.80	00	-14	-13	17	-58	-41	-52	-11	87	46	69
Dietitian	28	11	53	58	18	22	08	-21	20	.75	-09	16	53	08	33	47	.65	-36	-48	-46	09	-33	28	-01	19	87	57	49
Physical Ed. Teacher	28	10	30	24	00	11	84	08	-06	.87	-47	55	13	-19	46	08	.80	-56	-65	-70	-01	-63	26	21	-08	32	78	44
Occupational Therapist	39	12	00	24	19	86	03	-11	-09	.84	59	33	01	-15	46	37	.84	20	19	-01	27	-10	-04	-49	-62	46	54	09
Physical Therapist	34	11	24	68	06	29	56	13	-05	.94	-20	42	44	-14	68	09	.90	-53	-56	-71	02	-38	56	17	-14	45	89	33
Public Health Nurse	30	12	12	-17	39	58	37	30	10	.75	01	46	-38	-05	35	32	.59	04	-17	01	51	-22	-30	-39	-32	33	62	22
Registered Nurse	29	11	27	-01	39	63	44	05	-03	.82	08	62	-19	02	45	35	.75	-01	-29	-11	46	-40	-24	-37	-32	50	79	36
Lic. Practical Nurse	18	11	60	45	-01	28	38	29	-08	.87	-28	42	42	-19	45	32	.77	-51	-69	-67	02	-59	33	02	01	57	87	65
Radiologic Technologist	31	12	31	64	-25	16	54	-01	-13	.88	-25	20	51	-24	61	08	.80	-59	-58	-80	-32	-49	52	20	-12	39	79	44
Dental Assistant	22	11	76	24	-08	07	46	10	-02	.87	-49	32	32	-15	30	43	.74	-57	-79	-70	-09	-75	15	08	21	58	77	82
Executive Housekeeper	18	10	88	22	11	13	14	04	19	.87	-29	31	39	-02	07	64	.75	-45	-64	-51	12	-66	-01	00	35	77	62	87
Elementary Teacher	28	10	72	03	17	57	-01	23	-13	.92	09	50	15	-14	07	70	.79	-12	-38	-20	31	-56	-22	-44	-12	71	63	72
Secretary	27	10	79	-46	-13	-14	-03	-14	01	.88	-32	09	-03	-05	-41	57	.61	-17	-38	-13	-08	-66	-50	-23	39	33	11	79
Saleswoman	16	11	94	02	-05	11	09	-05	06	.91	-28	24	30	-06	-06	70	.73	-38	-58	-44	-02	-76	-17	-11	33	70	52	95
Telephone Operator	19	13	88	12	-18	14	21	06	-14	.89	-28	25	36	-20	08	62	.70	-46	-68	-56	-14	-78	-01	-08	17	63	63	93
Instrument Assembler	22	11	66	23	-50	-14	38	09	-01	.91	-52	05	42	-41	08	31	.72	-68	-64	-81	-50	-75	30	21	20	36	49	77
Sewing Machine Operator	11	10	76	15	-47	-05	20	17	07	.89	-46	10	41	-40	-04	37	.69	-60	-57	-70	-42	-76	19	05	23	43	44	83
Beautician	28	8	58	-45	-49	00	36	-11	10	.92	-41	16	-07	-43	-30	33	.58	-22	-32	-43	-39	-84	-35	-21	08	27	21	74
Airline Stewardess	28	11	44	-18	46	27	08	-64	-09	.92	23	36	-02	43	-04	53	.64	25	-15	16	41	-32	-54	-23	11	56	26	44
Percent of Total Variance			24.5	14.9		10.4		2.1			13.7	13.2		8.0		70.3												
			16.1		13.5		5.3		86.8		9.8		11.3		14.2													

Note.--All components are principal components rotated to varimax. Decimals for correlations have been omitted. Correlations ≥ .50 are underlined.

Table 4

Women's SVIB (TW398) Correlations Among the Composite Scores for Occupational Scale Groups and Component Scores for the Occupational Scales and Basic Interest Scales

	Scales	Composite Scores for Occupational Scale Groups											Occupational Scale Components						
		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	I	II	III	IV	V	VI	VII
Group	I. Music/Performing	1.00	66	75	26	39	-55	-51	-33	-20	-42	-40	-40	-46	19	34	-41	-30	-21
	II. Art	66	1.00	59	-08	55	-22	-39	-42	-35	-59	-62	-64	-25	-15	28	-51	-20	18
	III. Verbal-Linguistic	75	59	1.00	46	63	-58	-28	-07	-34	-61	-51	-39	-51	43	04	-56	09	17
	IV. Social Service	26	-08	46	1.00	24	-38	-03	14	15	14	-10	03	-15	95	16	-02	18	-00
	V. Verbal-Scientific	39	55	63	24	1.00	17	18	-02	-52	-59	-86	-73	15	32	-20	-50	06	-02
	VI. Scientific	-55	-22	-58	-38	17	2.00	52	05	-08	22	-19	-18	88	-26	-22	10	21	-02
	VII. Military/Managerial	-51	-39	-28	-03	18	52	1.00	57	-34	-09	-13	-07	40	16	-79	26	04	-04
	VIII. Business	-33	-42	-07	14	-02	05	57	1.00	05	-23	25	45	06	29	-77	15	-07	22
	IX. Home Economics	-20	-35	-34	15	-52	-08	-34	05	1.00	60	68	69	27	14	48	01	-23	23
	X. Health-Related Services	-42	-59	-61	14	-59	22	-09	-23	60	1.00	56	43	38	12	49	60	14	-06
	XI. Nonprofessional	-40	-62	-51	-10	-86	-19	-13	25	68	56	1.00	94	-05	-15	13	21	-05	01
	BIS Component I	69	63	49	12	36	-18	-50	-53	04	-17	-32	-33	03	07	58	-49	-30	-25
	BIS Component II	-01	-36	-15	45	-45	-19	-13	-15	25	55	29	24	-09	36	34	48	12	-19
	BIS Component III	-41	-36	-52	-26	-15	66	33	32	32	21	27	35	74	-16	-17	-14	-10	-13
	BIS Component IV	16	-13	43	60	39	-17	36	52	04	-18	-18	-00	03	76	-38	-13	-29	-14
	BIS Component V	-23	-18	-34	02	05	44	10	-36	18	62	-08	-19	54	11	33	42	02	-05
	BIS Component VI	-13	-25	-08	19	-43	-37	-34	09	74	34	68	71	-08	14	35	-16	-11	12

Note. - Decimals for correlations have been omitted. Correlations ≥ .60 are underlined.